



Tint Man Tips

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Tip: Color Stable versus Deep Dyed Films

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What is the difference between the terms of deep dyed and color stable? What do these two terms which seem interchangeable to the common person really mean in our industry? The changes in technologies since dyed film was first invented are to thank for the color stable term.

When deep dyed polyester was first produced, the dyes were not very stable. The dye is basically a mixture of red, yellow and blue. When dyed polyester was exposed to heat, UV light and UV Rays, all of which cause fading the yellow dye was the first to fade. Thus red and blue remain, in school we learned that these two colors make what? Why purple of course.

This leads everyone to say that the product faded purple, actually what we are seeing is a color shift. The color has shifted from a uniform one that the original dyes where formulated to produce to one that is not the original color. No matter what color we started with, it will always shift to purple, due to the loss of the yellow.

Now we have the term color stable, this means that all of the dyes, used to produce the original color are as stable, and consistent as each other. These films will still fade, but each color will fade in a uniform nature, the complete color spectrum will fade together, over time. The product will be lighter than when it was originally installed, but it will maintain its original shade. The fading takes longer than in the past but it will not color shift, as previous films have.

The technology to produce a color stable product is naturally more expensive. If I have a choice between two dyed products from the same supplier where one is called out as Color Stable as the other is not, chances are the lower cost one is not made with the stable dyes.

One final note, the term deep dyed is a process, and the resulting product could be color stable. When I am purchasing a product which is called non-reflective, I am seeking only the product which was produced using the best raw components available and deemed color stable.

There are many re-boxers and off shore products in the field at the moment, based on the prices we are seeing, will they color shift? Only time will tell.



Best Regards,

THE TINT MAN



Johnson Window Films